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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,749	11/15/2001	Maurizio Bazzo	Q67214	7450

7590 01/14/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

HEITBRINK, TIMOTHY W

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,749

Applicant(s)

BAZZO ET AL.

Examiner

Tim Heitbrink

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. (US Patent 6,394,784) in view of EP 750,975 and Trakas (US Patent 5,052,100).

Gellert et al. disclose an electrically heated nozzle 22 having an external surface with a first heating resistor 80 and a second independent heating resistor 90 each spirally wound around an internal surface of the nozzle to be conventional. The second resistor providing additional heat or redundancy for operational use when the first resistor fails. See column 9, lines 23-48. However, Gellert et al. do not position the resistors on an external surface groove.

EP 750,975 teaches an electrically heated nozzle in the same field of endeavor having a heating resistor 40 located in a spiral-shaped groove positioned around the periphery of the nozzle in order to heat the nozzle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the resistors of Gellert et al. in a spiral groove as suggested by EP 750,975 in order to heat the nozzle.

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Positioning the resistors in a side by side condition in the nozzle of Gellert et al. (as modified by EP 750,975) would have been obvious since Gellert et al. shows the resistors 80 and 90 in a side by side arrangement to be conventional. See also In re Japikse, 86 USPQ 70 where a shift in location of parts when operation of a device is not otherwise modified is considered within the skill of the ordinary artisan.

Providing a thermocouple for each resistor would have been obvious in view of Trakas where thermocouples 55 monitor the heat being applied to a bushing by separate heating elements. See column 7, lines 30-35.

Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 750,975 in view of Gellert et al. (US Patent 6,394,784) and Trakas (US Patent 5,052,100).

EP 750,975 teaches an electrically heated nozzle having a heating resistor 40 located in a spiral groove in order to heat the nozzle at a suitable operating temperature. However, EP 750,975 does not disclose an additional resistive heater to provide redundancy for operational use when the first resistor fails.

Gellert et al. disclose an electrically heated nozzle 22 having an external surface with a first heating resistor 80 and a second independent heating resistor 90 each spirally wound around the external surface of the nozzle to be conventional. The second resistor providing redundancy for operational use when the resistor fails. See column 9, lines 23-48.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an additional heating resistor in a spiral groove in the

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nozzle of EP 750,975 in order to provide redundancy for operational use when the first resistor fails as suggested by Gellert et al.

Providing a thermocouple for each resistor would have been obvious in view of Trakas where thermocouples 55 monitor the heat being applied to a bushing by separate heating elements. See column 7, lines 30-35.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. (US Patent 6,394,784) in view of EP 750,975.

Gellert et al. disclose an electrically heated nozzle 22 having an external surface with a first heating resistor 80 and a second independent heating resistor 90 each spirally wound around an internal surface of the nozzle to be conventional. The second resistor providing additional heat or redundancy for operational use when the first resistor fails. See column 9, lines 23-48. However, Gellert et al. do not position the resistors on an external surface groove.

EP 750,975 teaches an electrically heated nozzle in the same field of endeavor having a heating resistor 40 located in a spiral-shaped groove positioned around the periphery of the nozzle in order to heat the nozzle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the resistors of Gellert et al. in a spiral groove as suggested by EP 750,975 in order to heat the nozzle.

Positioning the resistors in a side by side (one on top of the other) condition in the nozzle of Gellert et al. (as modified by EP 750,975) would have been obvious since Gellert et al. shows the resistors 80 and 90 in a side by side arrangement to be

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conventional. See also *In re Japikse*, 86 USPQ 70 where a shift in location of parts when operation of a device is not otherwise modified is considered within the skill of the ordinary artisan.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 750,975 in view of Gellert et al. (US Patent 6,394,784).

EP 750,975 teaches an electrically heated nozzle having a heating resistor 40 located in a spiral groove in order to heat the nozzle at a suitable operating temperature. However, EP 750,975 does not disclose an additional resistive heater to provide redundancy for operational use when the first resistor fails.

Gellert et al. disclose an electrically heated nozzle 22 having an external surface with a first heating resistor 80 and a second independent heating resistor 90 each spirally wound around the external surface of the nozzle to be conventional. The second resistor providing redundancy for operational use when the resistor fails. See column 9, lines 23-48.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an additional heating resistor in a spiral groove in the nozzle of EP 750,975 in order to provide redundancy for operational use when the first resistor fails as suggested by Gellert et al.

Positioning the resistors in a side by side condition (one of top of the other) in the nozzle of EP 750,975 would have been obvious since Gellert et al. shows the resistors 80 and 90 positioned in a side by side arrangement to be conventional. See also *In re*


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Japikse, 86 USPQ 70 where a shift in location of parts when operation of a device is not otherwise modified is considered within the skill of the ordinary artisan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Heitbrink whose telephone number is 571-272-1132. The examiner can normally be reached on Tuesday-Friday 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Utech can be reached on 571-272-1132. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tim Heitbrink
Primary Examiner
Art Unit 1722

1-12-05

twH